INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

November 10, 2003

TO: Interested Parties / Applicant

RE: Mid-Continent Coal and Coke Company / 089-14296-05057

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 9/16/03

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

November 10, 2003

Mr. Carl Horst
Mid-Continent Coal and Coke Company
915 W. 175th Street
Homewood, Illinois 60430

Re: Significant Source Modification No:
089-14296-05057

Dear Mr. Horst:

Mid-Continent Coal and Coke Company applied for an operating permit on April 23, 2001 for a portable metallurgical coke screening plant. This source was permitted to construct in CP# 089-5867-05057, issued on September 30, 1996. IDEM is issuing a significant source modification permit for this portable coke screening plant to serve as an operating permit, which allows this portable coke screening plant to relocate to any source in Indiana without triggering the PSD or Emission Offset review process. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction and operation at the source:

(a) One (1) portable metallurgical coke screening operation, constructed in 1996, with a maximum capacity of 60 tons of coke per hour, consisting of the following:

(1) One (1) steel hopper.

(2) One (1) single deck screen.

(3) One (1) triple-deck screen.

(4) Six (6) conveyors.

(b) Two (2) diesel engines, identified as CAT 950B and CAT 966F, constructed in 1996, each with a maximum capacity of 130 hp and 170 hp, respectively.

(c) Paved and unpaved roads and parking lots with public access.

(d) Four (4) storage piles, with a total maximum capacity of 60 tons of coke per hour.

*(e) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons:

(1) One (1) diesel fuel storage tank, constructed in 1996, with a maximum capacity of 300 gallons.

*(f) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(1) One (1) welding station, which consumes less than 625 pounds of rod or wire per day.

(2) One (1) oxyacetylene cutting operation, which cuts less than 3,400 inches per hour of one inch thickness stock.

* Note: These units are considered insignificant activities as defined in 326 IAC 2-7-1(21).

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG,1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/YC

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Ramesh Tejuja/Rick Massoels
Compliance Data Section - Karen Nowak
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Mid-Continent Coal and Coke Company
3600 Canal Street
East Chicago, Indiana 46312
(Portable)

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Significant Source Modification No.: 089-14296-05057	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 10, 2003

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1, A.3 and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a portable metallurgical coke screening plant.

Responsible Official:	Manager of Operations
Initial Source Address:	3600 Canal Street, East Chicago, Indiana 46312
Source Mailing Address:	915 W. 175th Street, Homewood, Illinois 60430
General Source Phone Number:	(708) 798-1110
SIC Code:	5052
Initial County Location:	Lake
Source Location Status:	Nonattainment for Ozone, PM10, and SO_2 Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This coke handling facility consists of the following:

(a) RJR Drying, Inc., the primary operation, owns and operates a stationary coke handling and drying plant, located at 3600 Canal Street, East Chicago, Indiana 46312 (Plant ID # 089-00360); and

(b) MCCC, the supporting operation, owns and operates two (2) portable coke screening, sizing, and handling plants, located at 3600 Canal Street, East Chicago, Indiana 46312 (Plant ID # 089-05057 and #089-05217).

(c) American Terminal, owns RJR Dying, Inc., located at 3600 Canal Street, East Chicago, Indiana 46312 (Plant ID # 089-00357).

IDEM has determined that RJR Drying, Inc. and MCCC are one source under 326 IAC 2-7. These four (4) plants are considered one single source because they have a support relationship and are located on the same property. IDEM also determined that a source modification permit will be issued to each of MCCC's portable screening plants at this source as an operating permit, which allows the portable coke screening plants to relocate to any source in Indiana.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This portable source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) portable metallurgical coke screening operation, constructed in 1996, with a maximum capacity of 60 tons of coke per hour, consisting of the following:

(1) One (1) steel hopper.

(2) One (1) single deck screen.

(3) One (1) triple-deck screen.

(4) Six (6) conveyors.

(b) Two (2) diesel engines, identified as CAT 950 E (Serial # 22Z 04441) and CAT 950 E (Serial # 22Z 01451), constructed in 1990, each with a maximum capacity of 180 hp.

(c) Paved and unpaved roads and parking lots with public access.

(d) Four (4) storage piles, with a total maximum capacity of 60 tons of coke per hour.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This portable source has the following insignificant activities, as defined in 326 IAC 2-7-1(21).

(a) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons, including one (1) diesel fuel storage tank, constructed in 1996, with a maximum capacity of 550 gallons.[326 IAC 8-9]

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This portable source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [326 IAC 13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Local Agency Requirement

(a) If the portable coke screening plant seeks to move to an area under the jurisdiction of any applicable Local Air Pollution Control Agency (LAPCA), the LAPCA may enact additional air pollution control requirements. The Permittee should contact the LAPCA when planning to relocate into an applicable jurisdiction.

(b) The Local Air Pollution Control Agencies are:

Anderson
Jurisdiction: Madison County

Anderson Office of Air Management
P.O. Box 2100
120 East 8th Street, Anderson, Indiana 46011
(765) 648-6158 (Phone)
(765) 648-5924 (FAX)

Evansville
Jurisdiction: City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County

City of Evansville EPA
100 East Walnut Avenue, Suite 100, Evansville, Indiana 47708
(812) 435-6145 (Phone)
(812) 435-6155 (FAX)

Gary
Jurisdiction: City of Gary

Gary Department of Environmental Affairs
504 N. Broadway, Suite 1012, Gary, Indiana 46402
(219) 882-3007 (Phone)
(219) 882-3012 (FAX)

Hammond
Jurisdiction: City of Hammond

Hammond Department of Environmental Management
5925 Calumet Avenue, Hammond, Indiana 46320
(219) 853-6306 (Phone)
(219) 853-6343 (FAX)

Indianapolis
Jurisdiction: Marion County

Environmental Resources Management Division
Administration Building, 2700 South Belmont Ave, Indianapolis, Indiana 46221
(317) 327-2234 (Phone)
(317) 274-2274 (FAX)

St. Joseph County
Jurisdiction: St. Joseph County

St. Joseph County Health Department
County-City Building, Room 914, South Bend, IN 466601-1870
(219) 235-9721 (Phone)
(219) 235-9497 (FAX)

Vigo County
Jurisdiction: Vigo County

Vigo County Air Pollution Control
103 S. 3rd St., Terre Haute, IN 47807
(812) 462-3433 (Phone)
(812) 462-3433(FAX)

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit)

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit). IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an

exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit)

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

C.4 Opacity [326 IAC 5-1]

As a portable source which can relocate to any county in Indiana and pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

The Permittee shall comply with the applicable provisions of 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures).

C.7 Fugitive Dust Emissions [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on June 12, 2003. This plan is attached as Attachment A.

C.8 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on June 12, 2003. This plan indicates that the fugitive emissions will be controlled by spraying the unpaved roads with water on an as-needed basis.

C.9 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63 , such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ, and any applicable local air control agency (as described in Condition B.4 of this permit) upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; is applicable or responsive to the excursion, the Permittee shall devise and implement

additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ, and any applicable local air control agency (as described in Condition B.4 of this permit) shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered deviation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.14 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) or regional office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit).

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this Permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit).

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) on or before the date it is due.

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Portable Source Requirement

C.17 Relocation of Portable Sources [326 IAC 2-14-4]

(a) This permit is approved for operation in all areas of Indiana. A thirty (30) day advance notice of relocation must be given to IDEM, OAQ, and a "Relocation Site Approval" letter must be obtained before relocating. The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall also notify the applicable local air pollution control agency when relocating to, or from, one the following:

(1) Madison County - (Anderson Office of Air Quality)

(2) City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County - (Evansville EPA)

(3) City of Gary - (Gary Department of Environmental Affairs)

(4) City of Hammond - (Hammond Department of Environmental Management)

(5) Marion County - (Indianapolis Air Pollution Control Agency)

(6) St. Joseph County - (St. Joseph County Health Department)

(7) Vigo County - (Vigo County Air Pollution Department)

(c) That a valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(a) One (1) portable metallurgical coke screening operation, constructed in 1996, with a maximum capacity of 60 tons of coke per hour, consisting of the following:

(1) One (1) steel hopper.

(2) One (1) single deck screen.

(3) One (1) triple-deck screen.

(4) Six (6) conveyors.

(b) Two (2) diesel engines, identified as CAT 950 E (Serial # 22Z 04441) and CAT 950 E (Serial # 22Z 01451), constructed in 1990, each with a maximum capacity of 180 hp.

(c) Paved and unpaved roads and parking lots with public access.

(d) Four (4) storage piles, with a total maximum capacity of 60 tons of coke per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor and Emission Offset Minor Limits [326 IAC 2-2] [326 IAC 2-3]

(a) The PM and PM10 emissions from the hopper, the screens, and the conveyor transfer points of the portable screening plant shall not exceed the emission rates listed in the table below:

Emission Units	PM Emission Limit (lbs/hr)	PM10 Emission Limit (lbs/hr)
Hopper	0.10	0.10
Singe-Deck Screen	0.15	0.15
Triple-Deck Screen	0.30	0.30
Each Conveyor Transfer Point	0.01	0.01

This is equivalent to 2.67 tons/yr of PM and PM10 emissions. Combined with the PM and PM10 emissions from the engines, storage piles, unpaved roads, and the insignificant activities, the PM and PM10 emissions from this portable coke screening plant are limited to less than 25 tons/yr for PM and less than 15 tons/yr for PM10.

(b) Pursuant to CP# 089-5867-05057, issued on September 30, 1996, the total diesel fuel usage for the engines shall not exceed 77.5 kgal per twelve (12) consecutive month period with compliance determined at the end of each month. This is equivalent to 24 tons/yr of NO_x emissions, and the NO_x emissions from the entire portable coke screening plant are limited to less than 40 tons/yr.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) are not applicable.

D.1.2 PM and Particulate [326 IAC 6-1-2][326 IAC 6-3-2]

The PM and particulate emissions from this portable coke screening plant shall comply with one of the following:

(a) Pursuant to 326 IAC 6-1-2 (Nonattainment Area Limitations), if this portable source is collocated with any source located in Clark, Dearborn, Dubois, Howard, Lake, Marion, St. Joseph, Vanderburgh, Vigo, or Wayne Counties and has potential to emit PM from the entire source (including this portable coke screening plant) greater than 100 tons/yr; has actual PM emissions from the entire source greater than 10 tons/yr, the PM emissions from each of the hopper, the screens, and the conveyor transfer points shall not exceed 0.03 grain per dry standard cubic foot.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), if this portable source is not subject to 326 IAC 6-1-2, particulate emissions from each of the hopper, the screens, and the conveyor transfer points shall be limited to less than 46.3 pounds per hour when operating at a process weight rate of 60 tons per hour. This limit was calculated using the following equation.

Interpolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

D.1.3 Fugitive Particulate Matter (PM) [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), compliance with the opacity limits specified in Condition C.7 (Fugitive Dust Emissions) shall be achieved by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan (FDCP). If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.1.5 PM and PM10 Control

In order to comply with Conditions D.1.1(a) and D.1.2, the Permittee shall use wet suppression to control emissions of PM and PM10 from the hopper, screens and conveyors as necessary to ensure that the coke processed has a moisture content greater than 10 percent. The suppressant shall be applied in a manner and at a frequency sufficient to ensure compliance with 326 IAC 2-2, 326 IAC 2-3, and 326 IAC 6-2-3. If weather conditions preclude the use of wet suppression, the Permittee shall perform chemical analysis on the coke to ensure it has a moisture content greater than 10 percent. The method for moisture content analysis shall be approved by IDEM, OAQ.

D.1.6 Particulate Matter (PM) [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), opacity from the activities shall be determined as follows:

(a) Paved Roads and Parking Lots
The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(b) Unpaved Roads and Parking Lots
The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the fugitive dust control plan.

(c) Batch Transfer
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.

(d) Continuous Transfer
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.

(e) Wind Erosion from Storage Piles
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plum and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.

(f) Wind Erosion from Exposed Areas
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

(g) Material Transported by Truck or Rail
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the inplant transportation requirement.

(h) Material Transported by Front End Loader or Skip Hoist
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(i) Material Processing Limitations
Compliance with all opacity limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 9. Compliance with all visible emissions limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 22. Compliance with all particulate matter limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 5 or 17.

(j) Dust Handling Equipment
Compliance with this standard shall be determined by 40 CFR 60, Appendix A, Method 9.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.7 Visible Emissions Notations

(a) Visible emission notations of the exhausts from the hopper, the screens, and the conveyor transfer points shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements

(a) In order to demonstrate compliance with Condition D.1.1(b), the Permittee shall maintain records of the diesel fuel usage in the engines.

(b) To document compliance with Condition D.1.5, the Permittee shall maintain records of the chemical analysis of the coke, as needed.

(c) To document compliance with Condition D.1.7, the Permittee shall maintain once per shift records of visible emission notations of the exhausts from the hopper, the screens and the conveyor transfer points.

(d) To document compliance with Condition D.1.6 and 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the source shall keep the following documentation to show compliance with each of its control measures and control practices:

(1) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.

(2) For each application of water or chemical solution to roadways, the following shall be recorded:

(A) The name and location of the roadway controlled

(B) Application rate

(C) Time of each application

(D) Width of each application

(E) Identification of each method of application

(F) Total quantity of water or chemical used for each application

(G) For each application of chemical solution, the concentration and identity of the chemical

(H) The material data safety sheets for each chemical

(3) For application of physical or chemical control agents not covered by 326 IAC 6-1-11.1(B), the following:

(A) The name of the agent

(B) Location of application

(C) Application rate

(D) Total quantity of agent used

(E) If diluted, percent of concentration

(F) The material data safety sheets for each chemical

(4) A log recording incidents when control measures were not used and a statement of explanation.

(5) Copies of all records required by this section shall be submitted to the department within twenty (20) working days of a written request by the department.

(e) To document compliance with Condition D.1.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements [326 IAC 6-1-11.1]

(a) A quarterly summary of the information to document compliance with Condition D.1.1(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent.

(b) Pursuant to 326 IAC 6-1-11.1 (e)(4)(G)(Lake County Fugitive Particulate Matter Control Requirements), a quarterly report shall be submitted, stating the following:

(1) The dates any required control measures were not implemented.

(2) A listing of those control measures.

(3) The reasons that the control measures were not implemented.

(4) Any corrective action taken.

(c) These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - General Reporting Requirements of this permit. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: **Insignificant Activities**

(a) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons, including one (1) diesel fuel storage tank, constructed in 1996, with a maximum capacity of 550 gallons. [326 IAC 8-9]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-9]

Pursuant to 326 IAC 8-9-6 (Volatile Organic Liquid Storage Vessels), the owner or operator of a stationary vessel with a capacity of less than thirty-nine thousand (39,000) gallons, and which is not exempt, shall maintain a record and submit to the department a report containing the following information on the vessel:

(a) The vessel identification number.

(b) The vessel dimensions.

(c) The vessel capacity.

(d) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4 (a) and 4 (b), if applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4 (b), if applicable, with a certification that the emission control equipment meets the applicable standards.

The owner or operator of a stationary vessel shall keep all records as described for the life of the vessel.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.2 Reporting Requirements

To document compliance with Condition D.2.1, a report containing the information described in Condition D.2.1 shall be submitted to IDEM, OAQ within 60 days after issuance of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Mid-Continent Coal and Coke Company
Source Address: 3600 Canal Street, East Chicago, Indiana 46312
Mailing Address: 915 W. 175th Street, Homewood, Illinois 60430
Source Modification No.: 089-14296-05057

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Report

Source Name: Mid-Continent Coal and Coke Company
Source Address: 3600 Canal Street, East Chicago, Indiana 46312
Mailing Address: 915 W. 175th Street, Homewood, Illinois 60430
Source Modification No.: 089-14296-05057
Facility: Diesel Engines
Parameter: Diesel Fuel Usage
Limit: Less than 77.5 kgal per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

ATTACHMENT A

FUGITIVE DUST CONTROL PLAN
June 12, 2003
American Terminal Plant
Plant ID #089-05057

Primary Contact
Carl Horst
Manager of Operations
915 W. 175th Street
Homewood, Illinois 60430
(708)798-1110
Off-hours number (708)267-7198

Roadway Control

1. Traffic is restricted to established and controlled roadways.

2. Vehicular traffic is limited to 5 mph.

3. Roadways are inspected daily to determine if dust suppression is required.

4. Fresh aggregate is applied to entry roadway annually, to minimize exposed silt.

5. Water sprays from a truck used as needed to wet down road and suppress dust.

Fines Stockpile Control Measures

1. End loader bucket drip height is minimized to lowest practical elevation.

2. Water is applied to fines stockpile as necessary to prevent visible emissions from leaving the property.

3. Water will not be applied during freezing weather, typically between October 15 and April 15.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document
for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	Mid-Continent Coal and Coke Company
Source Location:	3600 Canal Street, East Chicago, Indiana 46312 (Portable)
County:	Lake
SIC Code:	5052
Operation Permit No.:	F089-14296-05057
Permit Reviewer:	ERG/YC

On September 22, 2003, the Office of Air Quality (OAQ) had a notice published in The Post Tribune in Morrillville, and The Times in Munster, Indiana, stating that Mid-Continent Coal and Coke Company had applied for a Part 70 Significant Source Modification to operate a portable coke screening plant. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bold language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. The technical support document (TSD) for this significant source modification stated that there are two (2) portable coke screening plants (Plant IDs: #089-05057 and #089-05217) at this location and both of them are owned by MCCC. The operations at MCCC are considered collocated with the operations at RJR Drying, Inc. (#089-00360), which is owned by American Terminal (#089-00357). Therefore, Condition A.2 has been revised as follows:

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This coke handling facility consists of the following:

(b) MCCC, the supporting operation, owns and operates ~~a~~ **two (2)** portable coke screening, sizing, and handling plant**s**, located at 3600 Canal Street, East Chicago, Indiana 46312 (Plant ID # 089-05057 **and #089-05217**).

2. City of East Chicago is not a local air pollution control agency. Therefore, it has been removed from Condition B.4 - Local Agency Requirement.

B.4 Local Agency Requirement

...

(b)...

~~**East Chicago**~~
~~Jurisdiction: City of East Chicago~~

~~East Chicago Department of Environmental Management~~
~~4522 Indianapolis Blvd., East Chicago, Indiana 46312~~
~~(219) 391-8297 (Phone)~~
~~(219) 391-8237 (FAX)~~

3. The Fugitive Dust Control Plan from the source was submitted on June 12, 2003. Therefore, Conditions C.7 and C.8 have been corrected as follows:

C.7 Fugitive Dust Emissions [326 IAC 6-1-11.1]

. . .

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on June ~~16~~ **12**, 2003**.** This plan is attached as Attachment A.

C.8 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on ~~July 31, 2002~~ **June 12, 2003**. This plan indicates that the fugitive emissions will be controlled by spraying the unpaved roads with water on an as-needed basis.

4. A compliance Response Plan shall be submitted to IDEM, OAQ and any applicable Local Air Control Agency upon request. Therefore, Condition C.13 has been revised as follows:

C.13 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63 , such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ, **and any applicable local air control agency (as described in Condition B.4 of this permit)** upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

...

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

...

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ, **and any applicable local air control agency (as described in Condition B.4 of this permit)** shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

5. There are no stack testing requirements associated with the units permitted in this Source Modification permit. Therefore, Condition C.15 - Actions Related to Noncompliance Demonstrated by a Stack Test has been removed from this permit.

~~C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]~~

~~[326 IAC 2-7-6]~~

~~(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~

~~(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.~~

~~(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.~~

~~The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

6. Condition D.1.5 has been revised as follows to specify that the method for moisture content analysis shall be approved by IDEM, OAQ.

D.1.5 PM and PM10 Control

In order to comply with Conditions D.1.1(a) and D.1.2, the Permittee shall use wet suppression to control emissions of PM and PM10 from the hopper, screens and conveyors as necessary to ensure that the coke processed has a moisture content greater than 10 percent. The suppressant shall be applied in a manner and at a frequency sufficient to ensure compliance with 326 IAC 2-2, 326 IAC 2-3, and 326 IAC 6-2-3. If weather conditions preclude the use of wet suppression, the Permittee shall perform chemical analysis on the coke to ensure it has a moisture content greater than 10 percent. **The method for moisture content analysis shall be approved by IDEM, OAQ.**

7. IDEM, OAQ has made the following corrections to Conditions C.17 (now C.16), C.18 (now C.17), D.1.3, D.2.1, and D.2.2.

C.~~17~~**16** General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.~~5~~**4** of this permit) on or before the date it is due.

C.~~18~~**17** Relocation of Portable Sources [326 IAC 2-14-4]

(b) The Permittee shall also notify the applicable local air pollution control agency when relocating to, or from, one the following:

(3) City of Gary - (Gary ~~Division of Air Pollution~~ **Department of Environmental Affairs**)

D.1.3 Fugitive Particulate Matter (PM) [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements),

compliance with the opacity limits specified in Condition C.~~5~~ **7** (Fugitive Dust Emissions) shall be achieved by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan (FDCP). If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval.

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-9]

(d) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4 (a) and 4 (b), **if** applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4 (b), if applicable, with a certification that the emission control equipment meets the applicable standards.

D.2.2 ~~Record Keeping~~ **Reporting** Requirements

To document compliance with Condition D.2.1, a report containing the information described in Condition D.2.1 shall be submitted to IDEM, OAQ **within 60 days after issuance of this permit**.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Part 70 Significant Source Modification

Source Background and Description

Source Name:	Mid-Continent Coal and Coke Company
Initial Source Location:	3600 Canal Street, East Chicago, Indiana 46312
County:	Lake
SIC Code:	5052
Operation Permit No.:	See Source Definition Section
Operation Permit Issuance Date:	See Source Definition Section
Significant Source Modification No.:	089-14296-05057
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from Mid-Continent Coal and Coke Company (referred to as "MCCC") relating to the operation of the following emission units and pollution control devices:

(a) One (1) portable metallurgical coke screening operation, constructed in 1996, with a maximum capacity of 60 tons of coke per hour, consisting of the following:

(1) One (1) steel hopper.

(2) One (1) single deck screen.

(3) One (1) triple-deck screen.

(4) Six (6) conveyors.

(b) Two (2) diesel engines, identified as CAT 950 E (Serial # 22Z 04441) and CAT 950 E (Serial # 22Z 01451), constructed in 1990, each with a maximum capacity of 180 hp.

(c) Paved and unpaved roads and parking lots with public access.

(d) Four (4) storage piles, with a total maximum capacity of 60 tons of coke per hour.

*(e) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons:

(1) One (1) diesel fuel storage tank, constructed in 1996, with a maximum capacity of 550 gallons.

*(f) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(1) One (1) welding station, which consumes less than 625 pounds of rod or wire per day.

(2) One (1) oxyacetylene cutting operation, which cuts less than 3,400 inches per hour of one inch thickness stock.

* Note: These units are considered insignificant activities as defined in 326 IAC 2-7-1(21).

History

On April 23, 2001, MCCC submitted a permit application to the OAQ requesting permission to operate a metallurgical coke screening plant. This source was permitted to construct in CP# 089-5867-05057, issued on September 30, 1996. In a meeting with MCCC on September 9, 2002, IDEM determined the following:

(a) The source is a portable source and is co-located with RJR Drying, Inc (Plant ID# 089-00360), which is a coke handling and drying plant.

(b) This portable coke screening plant may co-locate with any source in Indiana, including sources that are major sources under the Part 70, Emission Offset, and Prevention of Significant Deterioration programs. IDEM will issue a significant source modification permit for this portable coke screening plant to serve as an operating permit, which allows this portable coke screening plant to relocate to any source as a PSD or Emission Offset minor modification to the source relocated to.

Source Definition

This coke handling facility consists of the following:

(a) RJR Drying, Inc., the primary operation, owns and operates a stationary coke handling and drying plant, located at 3600 Canal Street, East Chicago, Indiana 46312 (Plant ID # 089-00360);

(b) MCCC, the supporting operation, owns and operates two (2) portable coke screening, sizing, and handling plants, located at 3600 Canal Street, East Chicago, Indiana 46312 (Plant ID # 089-05057 and #089-05217); and

(c) American Terminal, owns RJR Dying, Inc., located at 3600 Canal Street, East Chicago, Indiana 46312 (Plant ID # 089-00357).

In the meeting with the representatives from RJR and MCCC on September 9, 2002, IDEM determined that RJR Drying, Inc. and MCCC are one source under 326 IAC 2-7. These four (4) plants are considered one single source because they have a support relationship and are located on the same property. IDEM also determined that a source modification permit will be issued to each of MCCC's portable screening plants at this source as an operating permit. These source modification permits limit the PTE of each screening plant to less than the PSD and Emission Offset major modification thresholds, which allows these portable screening plants to relocate to any sources in Indiana. The combined total source PTE will remain less than Title V, PSD Major, and Emission Offset major thresholds.

Ispat Inland, Inc. (Plant ID #089-00316) is a steel mill and is located in the adjacent property. Less than 50% of the coke received at this source is from Ispat Inland, therefore, this source and Ispat Inland do not have a supporting relationship. Therefore, this source and Ispat Inland are considered two (2) separate sources.

Enforcement Issue

(a) IDEM is aware that equipment has been operated prior to receipt of the proper permit. This source was permitted to constructed in CP #089-5867-05057, issued on September 30, 1996. Since this source is collocated with a FESOP source, but could collocate with a Part 70 source, MCCC was required to submit a Part 70 application within twelve (12) months after commencing construction (September 30, 1997), pursuant to 326 IAC 2-7-4(a)(1). The operating permit application was received on April 18, 2001.

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 18, 2001. Additional information was received on June 16, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 5).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	91.9
PM-10	37.0
SO_2	3.23
VOC	4.89
CO	10.5
NO_x	48.9

HAP's	Potential To Emit (tons/year)
Total HAPs	Negligible

Justification for Modification

The modification is performed through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5 (f)(4) as the potential to emit PM, PM10, and NOx from this portable coke screening plant is each greater than twenty-five (25) tons per year.

County Attainment Status

The source is initially located in Lake County.

Pollutant	Status
PM-10	Moderate Nonattainment*
SO_2	Primary Nonattainment
NO_2	Attainment
Ozone	Severe Nonattainment
CO	Maintenance Attainment
Lead	Attainment

*Note: Lake County has been federally redesignated in 40 CFR 81.315 as attainment for PM10. The Air Pollution Control Board will be making the same redesignation in the state rules.

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Lake County has been designated as nonattainment for PM10 and SO_2. Therefore, PM10 and SO_2 emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(c) Lake County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Fugitive Emissions
Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, and 326 IAC 2-3, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	*Greater than 100
PM-10	*Greater than 100
SO_2	*Greater than 100
VOC	*Greater than 100
CO	*Greater than 100
NOx	*Greater than 100

* Assume that this portable source could be relocated to a source where at least one of the pollutants is greater than the major thresholds for Emission Offset and Prevention of Significant Deterioration programs.

(a) The existing source where the portable equipment is located is potentially a PSD major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more and it is in one of the 28 listed source categories.

(b) The existing source where the portable equipment is located is potentially an Emission Offset major stationary source because a nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more, or VOC is emitted at a rate of 25 tons per year or more.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Screening Plant	Less than 2.67	Less than 2.67	-	-	-	-	-
2 Diesel Engines	Less than 1.71	Less than 1.71	Less than 1.59	Less than 1.91	Less than 5.18	Less than 24.0	Negligible
*Unpaved Roads	Less than 3.30	Less than 0.65	-	-	-	-	-
*Storage Piles	0.12	0.06	-	-	-	-	-
Insignificant Activities	Less than 1.0	Less than 1.0	-	Less than 1.0	-	-	Negligible
Total PTE of the Modification	Less than 8.80	Less than 6.09	Less than 1.59	Less than 2.91	Less than 5.18	Less than 24.0	Negligible
PSD and Emission Offset Thresholds	25	15	40	25	100	40	NA

*Note: Since this portable screening plant could relocate to any source which is in one of the 28 source categories under 326 IAC 2-2 and 326 IAC 2-3, the fugitive particulate matter (PM) emissions from the unpaved roads and the storage piles are counted towards determination of PSD and Emission Offset applicability.

(a) This modification to an existing major stationary source is not major because the emission increase is less than the PSD and Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-2 and 326 IAC 2-3, the PSD and Emission Offset requirements do not apply.

(b) The PM and PM10 emissions from this portable coke screening plant are limited to less than 25 tons/yr for PM and less than 15 tons/yr for PM10. This is attained by the use of wet suppression to control the emissions from this portable coke screening plant.

Portable Source

(a) Initial Location
This is a portable source and its initial location is 3600 Canal Street, East Chicago, Indiana 46312.

(b) PSD and Emission Offset Requirements
The emissions from this portable source were reviewed under the requirements of the Prevention of Significant Deterioration (PSD), 326 IAC 2-2, and Emission Offset, 326 IAC 2-3.

(c) Fugitive Emissions
Since this plant is a portable source and could be located at a source that is in one (1) of the twenty-eight (28) listed sources under 326 IAC 2-2, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this portable source.

(b) This portable screening plant processes coke only. Coke does not meet the definition of "nonmetallic mineral" in 40 CFR 60.671. Therefore, the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR 60.670-676, Subpart OOO) are not applicable to this screening plant.

(c) The diesel fuel storage tank has a capacity less than 40 cubic meters (10,560 gallons). Therefore, the New Source Performance Standards for Volatile Organic Liquid Storage Vessels for which construction, reconstruction, or modification commenced after July 23, 1984 (40 CFR 60.110b - 117b, Subpart Kb) are not applicable to this tank.

(d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this portable source.

(e) This portable coke screening plant does not involve a pollutant-specific emissions unit:

(1) with the potential to emit before controls equal to or greater than one hundred (100) tons per year, and

(2) that is subject to an emission limit and has a control device that is necessary to meet that limit.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this portable coke screening plant.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset)
This portable coke screening plant was constructed in 1996. This portable plant could collocate with any PSD or Emission Offset major source which is in 1 of the 28 source categories defined in 326 IAC 2-2-1(p)(1). The potential to emit PM, PM10, and NO_x from this portable coke screening plant before control is each greater than the major modification thresholds.

(a) In order to be considered a minor modification when relocating this portable screening plant to any PSD or Emission Offset major source, the PM and PM10 emissions from the hopper, the screens, and the conveyor transfer points of this portable screening plant shall not exceed the emission rates listed in the table below:

Emission Units	PM Emission Limit (lbs/hr)	PM10 Emission Limit (lbs/hr)
Hopper	0.10	0.10
Singe-Deck Screen	0.15	0.15
Triple-Deck Screen	0.30	0.30
Each Conveyor Transfer Point	0.01	0.01

This is equivalent to 2.67 tons/yr of PM and PM10 emissions. Combined with the PM and PM10 emissions from the engines, storage piles, unpaved roads, and the insignificant activities, the emissions from this portable coke screening plant are limited to less than 25 tons/yr for PM and less than 15 tons/yr for PM10. The use of wet suppression ensures compliance with these limits.

(b) The NO_x emissions are mainly from the combustion process in two (2) diesel engines. Pursuant to CP# 089-5867-05057, issued on September 30, 1996, the total diesel fuel usage for the engines shall not exceed 77.5 kgal per twelve (12) consecutive month period. This is equivalent to 24 tons/yr of NO_x emissions.

Therefore, the requirement of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) are not applicable to this portable source.

326 IAC 2-4.1 (New Sources of Hazardous Air Pollutants)

The potential to emit HAPs from this portable source is less than the HAP major source thresholds. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than 10 tons/yr of NO_x and it is located in Lake County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

As a portable source which can relocate to any county in Indiana and pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-14-4 (Relocation of Portable Sources)

(a) This permit is approved for operation in all areas of Indiana. A thirty (30) day advance notice of relocation must be given to IDEM, OAQ, and a “Relocation Site Approval” letter must be obtained before relocating. The notification by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall also notify the applicable local air pollution control agency when relocating to, or from, one the following:

(1) Madison County - (Anderson Office of Air Management)

(2) City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County - (Evansville EPA)

(3) City of Gary - (Gary Division of Air Pollution)

(4) City of Hammond - (Hammond Department of Environmental Management)

(5) Marion County - (Indianapolis Air Pollution Control Agency)

(6) St. Joseph County - (St. Joseph County Health Department)

(7) Vigo County - (Vigo County Air Pollution Department)

(c) That a valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements)

The portable coke screening operation is currently located in Lake County. Therefore, the source is subject to the requirements of 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements) because it has the potential to emit fugitive particulate matter greater than five (5) tons per year. Pursuant to 326 IAC 6-1-11.1, the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero percent (0%) frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero percent (0%) frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on June 16, 2003. This plan indicates that the fugitive emissions will be controlled by spraying the unpaved roads with water on an as-needed basis.

Compliance Determination Requirements

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), opacity from the activities shall be determined as follows:

(a) Paved Roads and Parking Lots
The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(b) Unpaved Roads and Parking Lots
The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the fugitive dust control plan.

(c) Batch Transfer
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximate right angles to the plume.

(d) Continuous Transfer
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.

(e) Wind Erosion from Storage Piles
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximate right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.

(f) Wind Erosion from Exposed Areas
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

(g) Material Transported by Truck or Rail
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximate right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the inplant transportation requirement.

(h) Material Transported by Front End Loader or Skip Hoist
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(i) Material Processing Limitations
Compliance with all opacity limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 9. Compliance with all visible emissions limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 22. Compliance with all particulate matter limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 5 or 17.

(j) Dust Handling Equipment
Compliance with this standard shall be determined by 40 CFR 60, Appendix A, Method 9.

Record Keeping Requirements

(a) Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the source shall keep the following documentation to show compliance with each of its control measures and control practices:

(1) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.

(2) For each application of water or chemical solution to roadways, the following shall be recorded:

(A) The name and location of the roadway controlled

(B) Application rate

(C) Time of each application

(D) Width of each application

(E) Identification of each method of application

(F) Total quantity of water or chemical used for each application

(G) For each application of chemical solution, the concentration and identity of the chemical

(H) The material data safety sheets for each chemical

(3) For application of physical or chemical control agents not covered by 326 IAC 6-1-11.1(B), the following:

(A) The name of the agent

(B) Location of application

(C) Application rate

(D) Total quantity of agent used

(E) If diluted, percent of concentration

(F) The material data safety sheets for each chemical

(4) A log recording incidents when control measures were not used and a statement of explanation.

(5) Copies of all records required by this section shall be submitted to the department within twenty (20) working days of a written request by the department.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Reporting Requirements

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), a quarterly report shall be submitted, stating the following:

(a) The dates any required control measures were not implemented

(b) A listing of those control measures

(c) The reasons that the control measures were not implemented

(d) Any corrective action taken

These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - General Reporting Requirements of this permit.

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

The coke screening operation is currently located in Lake County and the potential to emit PM10 is greater than 10 tons/yr. Therefore, this source is subject to the requirements of 326 IAC 6-1-11.2.

326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4, the source shall not generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is subject to the requirements of 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) because it is a new source of particulate matter as described in 326 IAC 6-5-1(b). Pursuant to this rule, the Permittee shall control fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on June 16, 2003. This plan indicates that the fugitive emissions will be controlled by spraying the unpaved roads with water on an as-needed basis.

State Rule Applicability - Portable Coke Screening Operation

326 IAC 6-1-2 (Nonattainment Area Limitations)

The equipment at this portable coke screening plant is not specifically listed in rule 326 IAC 6-1-8.1 through 326 IAC 6-1-18. Currently, the actual emissions from this source, including four (4) collocated plants, are less than 10 tons/yr. Therefore, this portable coke screening plant is not subject to the requirements of 326 IAC 6-1-2 (Nonattainment Area Limitations)

As a portable source, the coke screening operation can relocate to any county in Indiana. If this source relocates to any sources which is located in Clark, Dearborn, Dubois, Howard, Lake, Marion, St. Joseph, Vanderburgh, Vigo, or Wayne Counties and has one of the following:

(a) The potential to emit PM from the entire source, including this portable coke screening plant, is greater than 100 tons/yr;

(b) The actual PM emissions from the entire source, including this portable coke screening plant, are greater than 10 tons/yr.

Then this portable coke screening plant will be subject to 326 IAC 6-1-2 and shall comply with the PM emission limit of 0.03 grain per dry standard cubic foot.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the hopper, the screens, and the conveyor transfer points shall not exceed 46.3 pounds per hour when operating at a process weight rate of 60 tons per hour. This limit was calculated using the following equation.

Interpolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

According to the emission calculations in Appendix A, the PM emissions from each of the hopper, the screens, and the conveyor transfer points are less than the emission limit above. Therefore, the hopper, the screens, and the conveyors are in compliance with 326 IAC 6-3-2. Note that if 326 IAC 6-1 applies to the equipment at this coke screening plant when it relocates to another source, then the requirements of 326 IAC 6-3-2 do not apply, pursuant to 326 IAC 6-3-1(b)(1).

State Rule Applicability - Two (2) Diesel Engines

326 IAC 7-1.1-2 (Sulfur Dioxide (SO_2) Emission Limitations)

The potential to emit SO_2 from each of the diesel engines is less than 25 tons/yr. Therefore, the requirements of 326 IAC 7-1.1-2 (Sulfur Dioxide (SO_2) Emission Limitations) are not applicable to these engines.

326 IAC 8-1-6 (New Facilities; General Reduction Requirement)

The potential VOC emissions from each diesel engine is less than twenty five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 (BACT) are not applicable.

326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties)

This portable coke screening plant can relocate to any county in Indiana. Pursuant to CP# 089-5867-05057, issued on September 30, 1996, the total diesel fuel usage for the engines shall not exceed 77.5 kgal per twelve (12) consecutive month period, which is equivalent to 24 tons/yr of NO_x emissions. Therefore, the requirements of 326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties) are not applicable to the engines at this portable coke screening plant.

State Rule Applicability - Insignificant Activities

326 8-4-3 (Petroleum Liquid Storage Facilities)

The diesel fuel storage tank has a capacity less than 39,000 gallons. Therefore, the requirements of 326 IAC 8-4-3 are not applicable to this tank.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

This portable coke screening plant is currently located in Lake County, therefore, the diesel fuel storage tank at this plant is subject to 326 IAC 8-9. Since this tank has a capacity less than 39,000

gallons, this tank is subject to the reporting and record keeping provisions of 326 IAC 8-9-6(a) and (b), which have the following requirements:

(a) The owner or operator of each vessel shall maintain records for the life of the vessel for the following information:

(1) The vessel identification number.

(2) The vessel dimensions.

(3) The vessel capacity.

(4) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4 (a) and 4 (b), applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4 (b), if applicable, with a certification that the emission control equipment meets the applicable standards.

(b) A report containing the information described in (a) shall be submitted to IDEM, OAQ.

326 IAC 6-3 (Manufacturing Processes)

The welding operation at this portable coke screening plant consumes less than 625 pounds of rod or wire per day. Therefore, the welding equipment at this portable coke screening plant is exempt from the requirements of 326 IAC 6-3, pursuant to 326 IAC 6-3-1(9).

326 IAC 6-3 (Manufacturing Processes)

The cutting operation at this portable coke screening plant cuts less than 3,400 inches per hour of one inch thickness stock. Therefore, the cutting operation at this portable plant is exempt from the requirements of 326 IAC 6-3, pursuant to 326 IAC 6-3-1(10).

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

1. The hopper, the screens, and the conveyors have applicable compliance monitoring conditions as specified below:

Visible emissions notations of the exhausts from the hopper, the screens, and the conveyor transfer points shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal.

For processes operated continuously “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

These monitoring conditions are necessary because the hopper, the screens, and the conveyors must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 6-3-2 (Manufacturing Processes).

Conclusion

The operation of this portable coke screening operation shall be subject to the conditions of the proposed Part 70 Significant Source Modification No. 089-14296-05057.

Appendix A: Emission Calculations
PM10 Emissions
From the Portable Coke Screening Plant

Company Name: Mid-Continent Coal and Coke Company
Address: 3600 Canal Street, East Chicago, IN 46312
SSM #: 089-14296-05057
Reviewer: ERG/YC
Date: July 1, 2003

Maximum Throughput Rate:
60 (tons/hr)

Process	Number of Units	Uncontrolled PM10 Emission Factor (lbs/ton)	Uncontrolled PTE of PM10 (lbs/hr/unit)	Uncontrolled PTE of PM10 (tons/yr)	Controlled PM10 Emission Factor (lbs/ton)	Controlled PTE of PM10 (lbs/hr/unit)	Controlled PTE of PM10 (tons/yr)
*Hooper	1	0.0043	0.258	1.13	0.000430	0.026	0.11
**Single Deck Screen	1	0.0150	0.900	3.94	0.000840	0.050	0.22
** Triple-Deck Screen	1	0.0710	4.260	18.66	0.002100	0.126	0.55
**Conveyor Transfer Points	6	0.0014	0.084	2.21	0.000048	0.003	0.08
Total				**25.9**			**0.96**

* The uncontrolled emission factor for the feeder is the one for low silt batch drop from iron and steel mill in AP-42, Table 12.5.4 (10/86). The controlled emission factor is calculated assuming 90% control by wet suppression.

** The uncontrolled and controlled emission factors for the conveyor transfer point, screeners are from AP-42, Chapter 11.19, Table 11.19.2-2 - crushed stone processing operations (AP-42 01/95). The controlled emission factors reflect water suppression.

Methodology

Uncontrolled Emissions (lbs/hr/unit) = Maximum Throughput (tons/hr) x Uncontrolled Emission Factor (lb/ton)
Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (lbs/hr/unit) x Number of Units x 8760 hr/yr x 1 ton/2000 lbs
Controlled Emissions (lbs/hr/unit) = Maximum Throughput (tons/hr) x Controlled Emission Factor (lb/ton)
Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr/unit) x Number of Units x 8760 hr/yr x 1 ton/2000 lbs

Appendix A: Emission Calculations
PM Emissions
From the Portable Coke Screening Plant

Company Name: Mid-Continent Coal and Coke Company
Address: 3600 Canal Street, East Chicago, IN 46312
SSM #: 089-14296-05057
Reviewer: ERG/YC
Date: July 1, 2003

Maximum Throughput Rate:
60 (tons/hr)

Process	Number of Units	Uncontrolled PM Emission Factor (lbs/ton)	Uncontrolled PTE of PM (lbs/hr/unit)	Uncontrolled PTE of PM (tons/yr)	Controlled PM Emission Factor (lbs/ton)	Controlled PTE of PM (lbs/hr/unit)	Controlled PTE of PM (tons/yr)
*Feeder	1	0.0088	0.528	2.31	0.000880	0.053	0.23
**Single Deck Screen	1	0.0315	1.890	8.28	0.001764	0.106	0.46
** Triple-Deck Screen	1	0.1491	8.946	39.18	0.004410	0.265	1.16
**Conveyor Transfer Points	6	0.00294	0.176	4.64	0.000101	0.006	0.16
Total				**54.4**			**2.01**

* The uncontrolled emission factor for the feeder is the one for low silt batch drop from iron and steel mill in AP-42, Table 12.5.4 (10/86). The controlled emission factor is calculated assuming 90% control by wet suppression.

** The uncontrolled and controlled emission factors for the conveyor transfer point and screeners are from AP-42, Chapter 11.19, Table 11.19.2-2 - Crushed stone processing operations (AP-42 01/95). The controlled emission factors reflect water suppression. Assume all TSP emissions equal to PM emissions and the TSP emission factors can be estimated by multiplying PM10 emission factors by 2.1.

Methodology

Uncontrolled Emissions (lbs/hr/unit) = Maximum Throughput (tons/hr) x Uncontrolled Emission Factor (lb/ton)
Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (lbs/hr/unit) x Number of Units x 8760 hr/yr x 1 ton/2000 lbs
Controlled Emissions (lbs/hr/unit) = Maximum Throughput (tons/hr) x Controlled Emission Factor (lb/ton)
Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr/unit) x Number of Units x 8760 hr/yr x 1 ton/2000 lbs

Appendix A: Emission Calculations
Internal Combustion Engines

From the Two (2) Diesel Engines

Company Name: Mid-Continent Coal and Coke Company
Address: 3600 Canal Street, East Chicago, IN 46312
SSM #: 089-14296-05057
Reviewer: ERG/YC
Date: July 1, 2003

1. Potential to Emit from the Engines:

Power Output
Horse Power
360.0 (2 units combined)

	Pollutant					
	PM*	PM10*	SO_2	NO_x	**VOC	CO
Emission Factor in lb/HP-hr	2.20E-03	2.20E-03	2.05E-03	3.10E-02	2.47E-03	6.68E-03
Potential Emission in tons/yr	**3.47**	**3.47**	**3.23**	**48.9**	**3.89**	**10.5**

*Assume PM10 emissions are equal to PM emissions.
** Assume TOC (total organic compounds) emissions are equal to VOC emissions.

Methodology

Emission Factors from AP-42, Chapter 3.3, Table 3.3-1, SCC #2-02-001-02 and 2-03-001-01.(AP-42 Supplement B 10/96)

Emission (tons/yr) = Power Ouput (HP) x Emission Factor (lb/HP-hr) x 8760 hr/yr x 1 lb/2,000 ton

2. Limited Potential to Emit:

Power Output
Horse Power
300.0 (2 units total)

Fuel Usage Limit
77.5 Kgal

	Pollutant					
	PM*	PM10*	SO_2	NO_x	**VOC	CO
Emission Factor in lb/HP-hr	2.20E-03	2.20E-03	2.05E-03	3.10E-02	2.47E-03	6.68E-03
Potential to Emit in tons/yr	**1.71**	**1.71**	**1.59**	**24.0**	**1.91**	**5.18**

*Assume PM10 emissions are equal to PM emissions.
** Assume TOC (total organic compounds) emissions are equal to VOC emissions.

Methodology

All emission factors are based on normal firing.
Emission Factors from AP-42, Chapter 3.3, Table 3.3-1, SCC #2-02-001-02 and 2-03-001-01.(AP-42 Supplement B 10/96)

PTE (tons/yr) = Fuel Limit (kgal/yr) x 140,000 (Btu/gal) x 1000 (gal/kgal) x 1/7000 (HP-hr/Btu) x Emission Factor (lb/HP -hr) x 1 ton/2,000 lbs

Appendix A: Emission Calculations
Fugitive Emissions
From the Unpaved Roads (Fugitive Emissions)

Company Name: Mid-Continent Coal and Coke Company
Address: 3600 Canal Street, East Chicago, IN 46312
SSM #: 089-14296-05057
Reviewer: ERG/YC
Date: July 1, 2003

1. Emission Factors:

According to AP42, Chapter 13.2.2 - Unpaved Roads, the PM emission factors from the unpaved roads can be estimated from the following equation:

$$E = \frac{k \times (s/12)^a \times (w/3)^b}{(M/0.2)^c}$$

where:

E =	emission factor (lb/vehicle mile traveled)	
s =	surface material silt content (%) =	4.9 %
w =	mean vehicle weight (tons)	
M =	surface material moisture content (%) =	0.2 %
k =	empirical constants =	10 for PM and 2.6 for PM10
a =	empirical constant =	0.8
b =	empirical constant =	0.5 for PM and 0.4 for PM10
c =	empirical constant =	0.4 for PM and 0.3 for PM10

2. Potential Emissions from the Unpaved Roads:

Mean Vehicle weight (W) = 45 tons (End-Dump Semi Trucks)
Annual Traveled Mileage = 14.25 trip/day x 0.667 mile/roundtrip x 365 days/yr = 3484.8 miles/yr

PM Emission Factor = $\frac{10 \times (4.9/12)^{0.8} \times (45/3)^{0.5}}{(0.2/0.2)^{0.4}}$ = 18.9 lbs/mile

PM10 Emission Factor = $\frac{2.6 \times (4.9/12)^{0.8} \times (45/3)^{0.4}}{(0.2/0.2)^{0.3}}$ = 3.75 lbs/mile

Potential PM Emissions = 3484.8 mile/yr x 18.9 lbs/mile x 1 ton/2000 lbs = **33.0 tons/yr**
Potential PM10 Emissions = 3484.8 mile/yr x 3.75 lbs/mile x 1 ton/2000 lbs = **6.54 tons/yr**

3. Potential to Emit (PTE) of PM/PM10 After Control from Unpaved Roads:

The source proposed to use wet suppression to control fugitive dust emissions.
The control efficiency from wet supression is 90% when the moisture content is greater than 5%.

PTE of PM after Control = 33.0 tons/yr x (1 - 90%) = **3.30 tons/yr**
PTE of PM10 after Control = 6.54 tons/yr x (1 - 90%) = **0.65 tons/yr**

Appendix A: Emission Calculations
Potential PM and PM10 Emissions
From the Aggregate Piles (Fugitive Emissions)

Company Name: Mid-Continent Coal and Coke Company
Address: 3600 Canal Street, East Chicago, IN 46312
SSM #: 089-14296-05057
Reviewer: ERG/YC
Date: July 1, 2003

1. Emission Factors:

According to AP42, Chapter 13.2.4 - Aggregate Handling and Strage Piles, the emission factor of PM for aggregate handling process can be estimated from the following equation:

$$Ef = \frac{.0032 \times (U/5)^{1.3} \times k}{(M/2)^{1.4}}$$

where:

Ef =	Emission Factor (lbs/ton)		
k =	Particle size multipler =	0.74 for PM and 0.35 for PM10	
U =	Mean wind speed (mph) =	10	mph (provided by the source)
M =	Moisture content (%) =	12	% (provided by the source)

Therefore,

PM Emission Factor =	0.0005	lbs/ton process
PM10 Emission Factor =	0.0002	lbs/ton process

2. Potential to Emit PM/PM10 before Control:

Throughput Rate: 60 tons/hr (4 piles total)

Potential PM = 60 ton/hr x 0.0005 lbs/ton x 8760 hr/yr x 1 tons/2000 lbs = **0.12 tons/yr**

Potential PM10 = 60 ton/hr x 0.0002 lbs/ton x 8760 hr/yr x 1 tons/2000 lbs = **0.06 tons/yr**